

**REMARKS**

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "**Version with Markings to Show Changes Made.**"

Applicants have canceled claims 9, 20-65, 68 and 71-118, without prejudice or disclaimer. Applicants have also amended independent claim 1 pursuant to the agreement reached at the November 19, 2002 interview with the Examiner to recited, inter alia, that the sample is applied to a deposited continuous thin film by either adsorption or directly to a surface of the deposited continuous thin film. Support for this amendment can be found on the Specification on page 10, lines 2-4. This amendment was inserted, not to overcome any prior art, but for the sole purpose of clarifying that the sample is not part of the thin film which is originally deposited, but is itself applied to the previously deposited continuous thin film. Claim 1 was also amended to overcome the objection to the phrase "radiation-driven" by insertion of the phrase light desorption/ionization mass spectroscopy. Support for the amendment can be found on page 10, lines 8-12, and page 22, lines 3-6. Accordingly, claim 1, as amended, does not contain any new subject matter.

Claim 7 has been amended to overcome the rejection under 35 U.S.C. §112, first paragraph. Claim 7, as amended, recites a material used as the deposited continuous thin film is selected using criteria selected from the group consisting of laser-light reflection, optical absorption, species absorption, ambient adsorption, analyte drying, and combinations thereof. This language is supported by claim 7, as originally filed, together with language in the Specification which can be found on page 23, line 26 through page 24, line 7.

Claim 9 has been canceled, hence the rejection thereof under 35 U.S.C. §112, first paragraph, is now moot and should be withdrawn.

Applicants have amended the Specification to include the language set forth in originally filed claims 18 and 19. Accordingly, the rejection of claims 18 and 19 under 35 U.S.C. §112, first paragraph, is now moot and should be withdrawn.

Applicants have canceled claims 20 and 21, hence the rejection of claim 20 under 35 U.S.C. §112, first paragraph, is now moot and should be withdrawn.

Applicants have amended claim 6 to now recited that the deposited thin film is selected from the group consisting of: silicon, germanium, carbon, hydrogen and mixtures thereof. Support for this amendment can be found on page 7, lines 12-14. Accordingly, the rejection to claim 6 is now moot and should be withdrawn.

Applicants have amended claim 66 to remove "organic materials" therefrom. There remaining Markush members are supported by originally filed claim 6 and the Specification at page 7, lines 14-16. Accordingly, the rejection to claim 66 under 35 U.S.C. §112, first paragraph, is now moot and should be withdrawn.

Applicants respectfully submit that the rejections of claims 1-3, 6-7, 9-12, 14-21 and 66-70 under 35 U.S.C. §112, second paragraph, are also moot in view of the amendments to the claims.

Applicants respectfully traverse the rejection of claims 1-2, 6-7, 10-12, 14-17, 66, and 69-70 under 35 U.S.C. 102(b) as being anticipated by Koster (U.S. Patent No. 5,605,798). Koster relates to a matrix assisted laser-desorption/ionization (MALDI) process which involves the application of an organic matrix/analyte mixture to solid substrate. The problem associated with the use of an organic matrix/analyte mixture is set forth extensively throughout the Specification (see for example page 22, line 8 through page 23, line 22). It is the signal noise introduced by the organic matrix material itself that the present invention was designed to avoid. The method recited in the claims of the present invention are neither described nor suggested by the MALDI

process of Koster. In fact, Koster and all other MALDI references actually teach away from the method recited in the claims of the present invention.

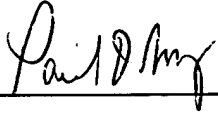
Similarly, Applicants respectfully traverse the rejection of claims 1-3, 6-7, 10-12, 14, 17-19, 66 and 69-70 under 35 U.S.C. §102(b) as being anticipated by Apffel et al. (U.S. Patent No. 5,705,813). Apffel et al. also describes a conventional MALDI process, and for the same reasons set forth above regarding Koster, it neither describes nor suggests that which is recited in the claims of the present invention.

Applicants also respectfully traverse the rejection of claims 67-68 under 35 U.S.C. §103(a) as being unpatentable over Apffel et al. in view of Hancock et al. (U.S. Patent No. 5,716,825). Hancock also describes the MALDI process and therefore does not overcome the substantial deficiencies of Apffel et al, discussed immediately above. Accordingly, Hancock, either alone or in combination with Apffel et al., does not disclose or suggest that which is recited in the claims of the present invention.

In view of the above remarks and amendments to the claims, applicants respectfully reconsideration and allowance of all the claims currently pending in this application. Should there be further issues, the undersigned would welcome a telephone call to facilitate their resolution.

Respectfully submitted,

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Paul D. Greeley  
Attorney for Applicants  
Registration No. 31,019  
Ohlandt, Greeley, Ruggiero & Peril, LLP  
One Landmark Square, 10<sup>th</sup> Floor  
Stamford, CT 06901-2682  
Telephone (203) 327-4500  
Fax (203) 327-6401

**VERSION WITH MARKINGS TO SHOW CHANGES MADE****In th Sp cification;**

Please amend the Specification as follows:

On Page 28, between lines 14 and 15, insert:

-- The sample is applied to the film directly from, or integrated with, a chemical, physical, or electrical separation means, or combination thereof. The separation means is selected from the group consisting of: liquid chromatography, gas chromatography, deposited thin film chromatography, gel, capillary or micro-capillary electrophoresis, or blotting. --

The paragraph on page 7, beginning on line 9 has been amended as follows:

The present invention is directed to deposited film structures having morphologies that are variable and tailorable from a continuous film (no voids) to a film comprising: (a) a network of columnar-like units in a continuous void; and (b) a substrate to which the network of columnar-like units is adhered. These films are [columnar-void films and are] based on chemical elements such as silicon, germanium, carbon, hydrogen or mixtures thereof. In a preferred embodiment, the substrate supporting these films is composed of a material such as glass, metal, ceramic, insulation material, plastic material, silicon or semiconductor-containing material. This invention covers the use of deposited AR films on these deposited films for enhancement of light coupling. Table 1 summarizes the deposited variable morphology films of this invention and some examples of morphology-applications tailoring.

**In th Claims:**

Please cancel claims 9, 20-65, 68 and 71-118, without prejudice or disclaimer.

Please amend the following claims:

1. (Twice Amended) A method for the analysis of a sample comprising:

(a) applying saida sample toen a deposited continuous thin film by either  
adsorption or directly to a surface of said deposited continuous thin film; and

(b) analyzing said sample by ~~radiation-driven~~ light desorption-/ionization  
mass spectroscopy.

6. (Twice Amended) A method according to claim 1, wherein said deposited  
thin film is selected from the group consisting of: semiconductors, insulators, organic  
materials, glasses, plastics, polymers, metals, ceramics and combinations thereof  
silicon, germanium, carbon, hydrogen and mixtures thereof.

7. (Twice Amended) A method according to claim 1, ~~further comprising the~~  
~~step of selecting wherein the material used as~~ said deposited continuous thin film is  
selected using criteria selected from the group consisting of: ~~electromagnetic energy~~  
~~reflection, electromagnetic energy absorption, sample wetting and drying, laser-light~~  
~~reflection, optical absorption, sample-species absorption and desorption,~~ analyte  
adsorption, ambient adsorption, ~~absorption and desorption,~~ analyte drying, and  
combinations thereof.

18. (Twice Amended) A method according to claim 17 wherein said sample is  
obtained from applying said sample to said continuous thin film is directly from, or

~~integrated with,~~ a separation means selected from at least one of the group consisting of: chemical, physical, ~~or~~and electrical separation means, ~~or combination thereof.~~

19. (Twice Amended) A method according to claim 18 wherein said chemical, ~~physical or electrical~~ separation means is selected ~~from~~ from at least one of the group consisting of: liquid chromatography, gas chromatography, deposited thin film chromatography, size exclusion chromatography, affinity chromatography, gel electrophoresis, capillary or micro-capillary electrophoresis, and blotting, ~~and combinations thereof.~~

66. (Amended) A method according to claim 1, wherein said deposited continuous thin film is deposited on a substrate selected from the group consisting of silicon, semiconductors, insulators, ~~organic materials,~~ glasses, plastics, polymers, metals, ceramics, and combinations thereof.